1) Scheda di lavoro con il reticolo di diffrazione 1000 linee/mm

nome:_____ data:_____

$$\sin\theta = k\frac{\lambda}{d} \qquad k = 1,2,3,.....$$

Anche in questo caso d è la distanza tra due fenditure, essendo queste molto vicine tra di loro si preferisce esprimere tale valore in linee per mm o in altre modalità; riporta dunque il valore di d in m

Reticolo di diffrazione con 1000 linee/mm $d = \dfrac{1}{1000\dfrac{linee}{mm}} = \dfrac{mm}{1000linee} = \dfrac{10^{-3}m}{10^{3}} = ...$

Luce laser colore: ..... $\lambda = ...nm$

k=1	$\theta_1 = \sin^{-1}\left(k\frac{\lambda}{d}\right) = \sin^{-1}\left(1\frac{.....\cdot 10^{-9}m}{.....m}\right) = \sin^{-1}(.....)$	$\theta_1 =$
k=2	$\theta_2 = \sin^{-1}\left(k\frac{\lambda}{d}\right) = \sin^{-1}\left(2\frac{.....\cdot 10^{-9}m}{.....m}\right) = \sin^{-1}(.....)$	$\theta_2 =$
k=3	$\theta_3 = \sin^{-1}\left(k\frac{\lambda}{d}\right) = \sin^{-1}\left(3\frac{.....\cdot 10^{-9}m}{.....m}\right) = \sin^{-1}(.....)$	$\theta_3 =$
k=4	$\theta_4 = \sin^{-1}\left(k\frac{\lambda}{d}\right) = \sin^{-1}\left(4\frac{.....\cdot 10^{-9}m}{.....m}\right) = \sin^{-1}(.....)$	$\theta_4 =$

Luce laser colore: ..... $\lambda = ...nm$

k=1	$\theta_1 = \sin^{-1}\left(k\frac{\lambda}{d}\right) = \sin^{-1}\left(1\frac{.....\cdot 10^{-9}m}{.....m}\right) = \sin^{-1}(.....)$	$\theta_1 =$
k=2	$\theta_2 = \sin^{-1}\left(k\frac{\lambda}{d}\right) = \sin^{-1}\left(2\frac{.....\cdot 10^{-9}m}{.....m}\right) = \sin^{-1}(.....)$	$\theta_2 =$
k=3	$\theta_3 = \sin^{-1}\left(k\frac{\lambda}{d}\right) = \sin^{-1}\left(3\frac{.....\cdot 10^{-9}m}{.....m}\right) = \sin^{-1}(.....)$	$\theta_3 =$
k=4	$\theta_4 = \sin^{-1}\left(k\frac{\lambda}{d}\right) = \sin^{-1}\left(4\frac{.....\cdot 10^{-9}m}{.....m}\right) = \sin^{-1}(.....)$	$\theta_4 =$

Luce laser colore: ..... $\lambda = ...nm$

k=1	$\theta_1 = \sin^{-1}\left(k\frac{\lambda}{d}\right) = \sin^{-1}\left(1\frac{.....\cdot 10^{-9}m}{.....m}\right) = \sin^{-1}(.....)$	$\theta_1 =$
k=2	$\theta_2 = \sin^{-1}\left(k\frac{\lambda}{d}\right) = \sin^{-1}\left(2\frac{.....\cdot 10^{-9}m}{.....m}\right) = \sin^{-1}(.....)$	$\theta_2 =$
k=3	$\theta_3 = \sin^{-1}\left(k\frac{\lambda}{d}\right) = \sin^{-1}\left(3\frac{.....\cdot 10^{-9}m}{.....m}\right) = \sin^{-1}(.....)$	$\theta_3 =$

2) Scheda di lavoro con il reticolo di diffrazione 500 linee/mm

nome:_____ data:_____

$$\sin\theta = k\frac{\lambda}{d} \qquad k = 1,2,3,.....$$

Anche in questo caso d è la distanza tra due fenditure, essendo queste molto vicine tra di loro si preferisce esprimere tale valore in linee per mm o in altre modalità; riporta dunque il valore di d in m

Reticolo di diffrazione con 500 linee/mm $d = \dfrac{1}{500\dfrac{linee}{mm}} = \dfrac{mm}{500linee} = \dfrac{10^{-3}m}{5\cdot10^{2}} = ...$

Luce laser colore: ..... $\lambda = ...nm$

k=1	$\theta_1 = \sin^{-1}\left(k\frac{\lambda}{d}\right) = \sin^{-1}\left(1\frac{.....\cdot10^{-9}m}{.....m}\right) = \sin^{-1}(.....)$	$\theta_1 =$
k=2	$\theta_2 = \sin^{-1}\left(k\frac{\lambda}{d}\right) = \sin^{-1}\left(2\frac{.....\cdot10^{-9}m}{.....m}\right) = \sin^{-1}(.....)$	$\theta_2 =$
k=3	$\theta_3 = \sin^{-1}\left(k\frac{\lambda}{d}\right) = \sin^{-1}\left(3\frac{.....\cdot10^{-9}m}{.....m}\right) = \sin^{-1}(.....)$	$\theta_3 =$
k=4	$\theta_4 = \sin^{-1}\left(k\frac{\lambda}{d}\right) = \sin^{-1}\left(4\frac{.....\cdot10^{-9}m}{.....m}\right) = \sin^{-1}(.....)$	$\theta_4 =$

Luce laser colore: ..... $\lambda = ...nm$

k=1	$\theta_1 = \sin^{-1}\left(k\frac{\lambda}{d}\right) = \sin^{-1}\left(1\frac{.....\cdot10^{-9}m}{.....m}\right) = \sin^{-1}(.....)$	$\theta_1 =$
k=2	$\theta_2 = \sin^{-1}\left(k\frac{\lambda}{d}\right) = \sin^{-1}\left(2\frac{.....10^{-9}m}{.....m}\right) = \sin^{-1}(.....)$	$\theta_2 =$
k=3	$\theta_3 = \sin^{-1}\left(k\frac{\lambda}{d}\right) = \sin^{-1}\left(3\frac{.....10^{-9}m}{.....m}\right) = \sin^{-1}(.....)$	$\theta_3 =$
k=4	$\theta_4 = \sin^{-1}\left(k\frac{\lambda}{d}\right) = \sin^{-1}\left(4\frac{.....10^{-9}m}{.....m}\right) = \sin^{-1}(.....)$	$\theta_4 =$

Luce laser colore: ..... $\lambda = ...nm$

k=1	$\theta_1 = \sin^{-1}\left(k\frac{\lambda}{d}\right) = \sin^{-1}\left(1\frac{.....\cdot10^{-9}m}{.....m}\right) = \sin^{-1}(.....)$	$\theta_1 =$
k=2	$\theta_2 = \sin^{-1}\left(k\frac{\lambda}{d}\right) = \sin^{-1}\left(2\frac{.....10^{-9}m}{.....m}\right) = \sin^{-1}(.....)$	$\theta_2 =$
k=3	$\theta_3 = \sin^{-1}\left(k\frac{\lambda}{d}\right) = \sin^{-1}\left(3\frac{.....10^{-9}m}{.....m}\right) = \sin^{-1}(.....)$	$\theta_3 =$
k=4	$\theta_4 = \sin^{-1}\left(k\frac{\lambda}{d}\right) = \sin^{-1}\left(4\frac{.....10^{-9}m}{.....m}\right) = \sin^{-1}(.....)$	$\theta_4 =$